



The Secretary of Energy
Washington, D.C. 20585

September 16, 2009

Mr. Claiborne P. Deming
Chair, National Petroleum Council
1625 K Street, NW
Washington, DC 20006

Dear Mr. Deming:

It is the policy objective of the United States to protect our Nation from the serious economic and strategic risks associated with our excessive reliance on foreign oil and the destabilizing effects of a changing climate. All energy uses and supply sources must be reexamined in order to enable the transition towards a lower carbon, more sustainable energy mix. Transitions in the energy sector will require the replacement of vehicles, more efficient buildings and industrial facilities, and large scale deployment of new forms of energy. The Council is uniquely positioned to provide advice to the Department on Energy on two important topics: *Future Transportation Fuels* and *Prudent Development of North American Natural Gas and Oil Resources*.

The U.S. transportation system must evolve substantially over the next twenty years in ways that advance our national interests. Next generation vehicles, fuels, and infrastructure will be introduced to diversify fuel choice, increase fuel economy and lower greenhouse gas and other emissions. Conventional and advanced biofuels will make an important contribution, with liquefied natural gas and non-liquid fuels such as electricity and compressed natural gas also helping the transition to a clean, low carbon energy future. Each fuel has technical, economic, infrastructure and social attributes that must be considered in evaluating its role in a modern, prosperous U.S. economy.

Policies to address the transition to an expanded suite of reliable, secure and clean, low-carbon transportation fuels require a comprehensive understanding of options, risks, and consequences. Accordingly, I request the National Petroleum Council to conduct a study on future transportation fuels which would analyze U.S. fuels prospects through 2030 for auto, truck, air, rail, and waterborne transport. The study should address fuel demand, sources, manufacturing, distribution, and infrastructure. Of particular interest is the Council's advice on policy options and pathways for integrating new fuels and vehicles into the marketplace, including infrastructure development. Factors to consider include technological advances, market dynamics, environmental mandates, cost/benefit tradeoffs, and impacts on land and water use.



Even as we transition to a lower carbon energy future, fossil fuels will continue to play a major role in the Nation's energy mix for many decades. An important part of this transition will be to recognize and responsibly develop the natural gas resources supply chain and infrastructure in North America. In recent years, there have been significant new developments in the North American natural gas and oil resource base. In particular, large new unconventional sources of natural gas and oil have been identified.

In order to consider energy policy measures that enhance U.S. energy security and economic competitiveness, it is important that Congress, the Administration, and relevant agencies have the best and most up-to-date understanding of conventional and unconventional resources supply chain and infrastructure potential. Accordingly, I request the National Petroleum Council to reassess the North American resources production supply chain and infrastructure potential, and the contribution that natural gas can make in a transition to a lower carbon fuel mix. Your study should describe the operating practices and technologies that will be used to minimize environmental impacts, and also describe the role of technology in expanding accessible resources. Of particular interest is the Council's advice on policy options that would allow prudent development of North American natural gas and oil resources consistent with government objectives of environmental protection, economic growth, and national security.

For the purposes of the Council's study of *Future Transportation Fuels* and the *Prudent Development of North American Natural Gas and Oil Resources*, I am designating Deputy Secretary Dan Poneman to represent me and to provide the necessary coordination between the Department of Energy and the National Petroleum Council. He will also provide coordination with the Department of the Interior, Department of Transportation, Environmental Protection Agency, and other Federal agencies as required.

Sincerely,

A handwritten signature in dark ink, appearing to read "Steven Chu", written in a cursive style.

Steven Chu